

OIPE

## ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/077,130

DATE: 03/04/2002 P.5

TIME: 14:49:08

Input Set : A:\Seq Listing.txt

Output Set: N:\CRF3\03042002\J077130.raw

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4 <110> APPLICANT: Kapeller-Libermann, Rosana
              Acton, Susan L.
       <120> TITLE OF INVENTION: 59079 and 12599, Protein Kinase Family
              Members and Uses Therefor
     11 <130> FILE REFERENCE: MPI2001-047P1RCP1(M)
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/077,130
C--> 13 <141> CURRENT FILING DATE: 2002-02-15
     13 <150> PRIOR APPLICATION NUMBER: 60/269201
     14 <151> PRIOR FILING DATE: 2001-02-15
     16 <160> NUMBER OF SEQ ID NOS: 9
     18 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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                     Met Gly Ala Ala Tyr Ser Ser Ala Arg Leu Leu Val Arg
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     41 ggc cct gat gag cca gaa gag aag cct gca tca gat gtg cat gag cag
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     42 Gly Pro Asp Glu Pro Glu Glu Lys Pro Ala Ser Asp Val His Glu Gln
                                                                            206
     45 ctg gtg ccg ccc cga atg ctg gag agg ttc acc ccc aag aaa gtg aag
     46 Leu Val Pro Pro Arg Met Leu Glu Arg Phe Thr Pro Lys Lys Val Lys
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     47
                             35
                                                                            254
     49 aaa ggc tcc agc atc acc ttc tct gtg aag gta gaa gga cgc ccg gtg
     50 Lys Gly Ser Ser Ile Thr Phe Ser Val Lys Val Glu Gly Arg Pro Val
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                         50
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     53 ccc acc gtg cac tgg ctc agg gag gat gag aga ggc gtg ctg tgg
     54 Pro Thr Val His Trp Leu Arg Glu Glu Ala Glu Arg Gly Val Leu Trp
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     57 att ggc cct gac aca ccg ggc tac acc gtg gcc agc tct gcg cag cag
     58 Ile Gly Pro Asp Thr Pro Gly Tyr Thr Val Ala Ser Ser Ala Gln Gln
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     61 cac age etg gte etg etg gae gtg gge egg eag eac eag gge ace tac
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63	Ser 95					100					T02					
65 202	tac	att	acc	agc	aac	qct	gcc	ggc	cag	gcc	ctc	tgc	tcc	gcc	agc	446
66 Thr	Cvs	Tle	Ala	Ser	Asn	Ála	Ăla	Gly	Gln	Ala	Leu	Cys	Ser	Ala	ser	
67 110					115					120					125	
69 ata	cac	at.c	t.ca	qqc	ctq	cct	aag	gtg	gag	gag	cag	gag	aaa	gtg	aag	494
70 Leu	His	Val	Ser	Glv	Leu	Pro	Lys	Val	Glu	Glu	Gln	Glu	Lys	Val	Lys	
71				130					135					140		
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73 gaa 74 Glu	Δla	Len	Tle	Ser	Thr	Phe	Leu	Gln	Gly	Thr	Thr	Gln	Ala	Ile	Ser	
75			145					150					122			
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78 Ala	Gln	Glv	Leu	Glu	Thr	Ālā	Ser	Phe	Ala	Asp	Leu	Gly	Gly	Gln	Arg	
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82 Lys	Glu	Glu	Pro	Leu	Ala	Āla	Lys	Glu	Āla	Leu	Gly	His	Leu	Ser	Leu	
83	175		110	200		180	_				185					
95 act	. aaa	ata	aac	aca	σασ	σασ	ttc	ctg	caq	aaa	ctg	acc	tcc	cag	atc	686
86 Ala	. guy	Val	Glv	Thr	Glu	Glu	Phe	Leu	Gln	Lys	Leu	Thr	Ser	Gln	Ile	
87 190		VUI	OI1	1111	195					200					205	
89 act	aan '	ato	αta	tca	acc	aaσ	atc	acq	caq	qcc	aag	ctg	cag	gtg	CCC	734
90 Th	. gay	Mot	Val	Ser	Δla	Lvs	Tle	Thr	Gln	Ãla	Lys	Leu	Gln	Val	Pro	
90 111	. Giu	Mec	Val	210	1114				215		-			220		
93 gg	aat	as a	ant	gat	σασ	gac	tcc	aaq	aca	cca	tct	gca	tcc	ccc	cgc	782
93 996 94 Gl	1 990 1 010	. yac	Sor	Δen	Glu	Asp	Ser	Lvs	Thr	Pro	Ser	Āla	Ser	Pro	Arg	
94 GI	, GTA	Азр	225	пър	OLU	rio p		230					235			
95 97 ca	- ~~		† Ca	caa	cca	tcc	tcc			caq	qaq	tct	tcc	tca	gag	830
97 Ca 98 Hi	- 990	, cya , Ara	Sor	Δrσ	Pro	Ser	Ser	Ser	Ile	Gln	Ğlu	Ser	Ser	Ser	Glu	
90 ni	ь сту	717		1119	110											
							245					250				
101 +	72 G	240		c da	t ac	c ca	245 a σσ					250				878
101 +	ca ga	240	c aa	c ga	t gc n Al	c cg a Ar	α σσ	c qa	q at	c tt	t ga	250 c at	c ta	c gt	g gtc	878
101 to 102 S	er Gl	240 Ig ga Lu As	c aa	c ga y As	t gc p Al	a Ar	a gg g Gl	c qa	q at	c tt	t ga	250 c at p Il	c ta	c gt	g gtc	878
101 to 102 S	er Gl	240 Ig ga Iu As	c gg p Gl	y As	p Al	a Ar 26	a gg g Gl	c ga y Gl	g at u Il	c tt e Ph	t ga e As 26	250 c at p Il 5	c ta e Ty	c gt r Va	g gtc 1 Val	878 926
101 t 102 S 103	er Gl 25	240 Ig ga Iu As 55	c gg p Gl	y As	a cc	a Ar 26 c ct	a gg g Gl 0	c ga y Gl	g at u Il t ga	c tt e Ph g ca	t ga e As 26 g ga	250 c at p Il 5 t gc	c ta e Ty c at	c gt r Va c ac	g gtc l Val	
101 to 102 S 103 105 a 106 T	er Gl 25 cc gc hr Al	240 Ig ga Iu As 55	c gg p Gl	y As	p Al g cc u Pr	a Ar 26 c ct o Le	a gg g Gl 0	c ga y Gl	g at u Il t ga	c tt e Ph g ca	t ga e As 26 g ga n As	250 c at p Il 5 t gc	c ta e Ty c at	c gt r Va c ac	g gtc 1 Val	
101 to 102 S 103 105 a 106 T 107 2	er Gl 25 cc gc hr Al	240 g ga u As 55 ct ga a As	c gg p Gl c ta p Ty	y As c ct r Le	p Al g cc u Pr 27	a Ar 26 c ct o Le 5	a gg g Gl i0 a gg eu Gl	c ga y Gl g gc y Al	g at u Il t ga a Gl	c tt e Ph g ca u Gl 28	t ga e As 26 g ga n As	250 c at p Il 5 t gc p Al	c ta e Ty c at a Il	c gt r Va c ac e Th	g gtc l Val g ctg r Leu 285	
101 to 102 S 103 105 a 106 T 107 2	er Gl 25 cc gc hr Al 70	240 g ga u As 55 ct ga a As	c gg p Gl c ta p Ty	y As c ct r Le	p Al g cc u Pr 27	a Ar 26 c ct o Le 5	a gg g Gl 0 a gg eu Gl	c ga y Gl g gc y Al	g at u Il t ga a Gl	c tte Phose can calculate can calculate calcul	t ga e As 26 g ga n As	c at p Il 5 t gc p Al	c ta e Ty c at a Il	c gt r Va c ac e Th	g gtc l Val g ctg ir Leu 285	926
101 t 102 S 103 105 a 106 T 107 2 109 c 110 A	er Gl 25 cc gc hr Al 70	240 g ga u As 55 ct ga a As	c gg p Gl c ta p Ty	y As c ct r Le g ta n Ty	g cc u Pr 27 t gt	a Ar 26 c ct o Le 5	a gg g Gl 0 a gg eu Gl	c ga y Gl g gc y Al	g at u Il t ga a Gl	c tte Phone can u Gl 28 ct gc	t ga e As 26 g ga n As	c at p Il 5 t gc p Al	c ta e Ty c at a Il	c gt r Va c ac e Th	g gtc 1 Val g ctg ir Leu 285 g cgc	926
101 t 102 S 103 105 a 106 T 107 2 109 C	er Gl 25 cc gc hr Al 70 gg ga rg Gl	240 ag ga au As 55 ct ga au As au Gl	c gg p Gl c ta p Ty c ca y Gl	y As c ct r Le g ta n Ty 29	g cc u Pr 27 t gt r Va	a Ar 26 c ct o Le 5 g ga 1 Gl	a gg g Gl 0 a gg eu Gl ug gt	c ga y Gl g gc y Al c ct	g at u Il t ga a Gl .g ga u As	c tt e Ph g ca u Gl 28 t gc	t ga e As 26 g ga n As 0 a gc	c at p II 5 t gc p Al c ca	c ta e Ty c at a Il .c cc	c gt r Va c ac e Th a ct o Le	g gtc 1 Val g ctg ir Leu 285 g cgc eu Arg	926
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101 t 102 S 103 105 a 106 T 107 2 109 c 110 A 111 113 t 114 T	er Gl 25 cc gc hr Al 70 gg ga rg Gl	240 ag ga au As 55 at ga a As aa gg	c gg p Gl c ta p Ty c ca y Gl c cg	y As c ct r Le g ta n Ty 29 c ac g Th	g cc u Pr 27 t gt r Va	a Ar 26 c ct o Le 5 g ga 1 Gl	a gg g Gl o a gg eu Gl ug gt u Va	c ga y Gl g gc y Al c ct il Le cc aa ir Ly	g atu Il t ga a Gl .g ga su As 29 .g to	c tte Ph g ca u Gl 28 t gc	t ga e As 26 g ga n As 0 a gc a Al	c at p II 5 t gc p Al c ca Hi	c ta e Ty c at a Il c cc s Pr	c gt r Va c ac e Th a ct a ct 30 g ca	g gtc 1 Val g ctg ir Leu 285 g cgc eu Arg	926 974
101 t 102 S 103 105 a 106 T 107 2 109 C 110 A 111 113 t 114 T	er Gl 25 cc gc hr Al 70 gg ga rg Gl gg ct	240 ag ga au As at ga au As au gg au Gl au Gl au Va	c gg p Gl c ta p Ty c ca y Gl .c cg .1 Ar	y As c ct r Le g ta n Ty 29 c ac g Th	g cc u Pr 27 t gt r Va c aa r Ly	a Ar 26 c ct o Le 5 g ga 1 Gl	a gg g Gl a gg u Gl u Gl u Va cc ac	c ga y Gl g gc y Al c ct al Le cc aa ir Ly 31	g atu Il t ga a Gl g ga u As u As c 29 c 56	c tte Phose can care care care care care care care care	t ga e As 26 g ga n As 0 a gc a Al	c at p II 5 5 t gc p Al c ca a Hi	c ta e Ty c at a Il c cc s Pr ca cg er Ar 31	c gtr Vac acce The act acce GG GG	g gtc l Val g ctg ir Leu 285 g cgc eu Arg 00 ig ggc n Gly	926 974
101 t 102 S 103 105 a 106 T 107 2 109 C 110 A 111 113 t 114 T	er Gl 25 cc gc hr Al 70 gg ga gg ct gg ct	240 ag ga au As at ga au As au As au Gl au Gl	c gg p Gl c ta p Ty c ca y Gl c cg 1 Ar	y As c ct r Le g ta n Ty 29 c ac g Th	p Al g cc u Pr 27 t gt r Va cc aa	a Ar 26 c ct o Le 5 g ga 1 Gl	a ggggg Gl a gggu Gl u Gl u Va cc acc	c ga y Gl g gc y Al c ct al Le cc aa r Ly 31	g atu Il t ga a Gl g ga eu As eu As eu Se	c tte Phone g can get get agent Secretary ct	t ga e As 26 g ga n As 0 a gc a Al	c at p II 5 5 t gc p Al c ca Hi	c ta e Ty c at a Il c cc s Pr ca cg r Ar 31	c gtr Vac a c a c t a c t a c t a c t c g c a c g G G S c a c a c c a	g gtc. 1 Val 2 ctg 2 ctg 2 cgc 2 arg 0 ggc n Gly 2 t gag	926 974 1022
101 t 102 S 103 105 a 106 T 107 2 109 c 110 A 111 113 t 114 T 115 117 t 118 T	er Gl 25 cc gc hr Al 70 gg ga gg ct gg ct	240 ag ga au As 55 ct ga au As au gg au Gl ct gt ct gt au Va	c gg p Gl c ta p Ty c ca y Gl c cg l Ar 30 ca cc	y As c ct r Le g ta n Ty 29 c ac g Th	p Al g cc u Pr 27 t gt r Va cc aa	a Ar 26 c ct o Le 5 g ga 1 Gl	a ggg Gl o a ggg u Gl u Va cc ac co Th	g gc g gc g Al c ct l Le cc aa lr Ly ac ag ac ag ac ag ac ag	g atu Il t ga a Gl g ga eu As eu As eu Se	c tte Phone g can get get agent Secretary ct	t ga e As 26 g ga n As 0 a gc a Al	c at p II 5 5 t gc p Al c ca Hi	c ta e Ty c at a Il c cc s Pr ca cg r Ar 31 cg tce u Se	c gtr Vac a c a c t a c t a c t a c t c g c a c g G G S c a c a c c a	g gtc l Val g ctg ir Leu 285 g cgc eu Arg 00 ig ggc n Gly	926 974 1022
101 t 102 S 103 105 a 106 T 107 2 109 C 110 A 111 113 t 114 T 115 117 t 118 T	er Gl 25 cc gc hr Al 70 gg ga gg ct rp Le gg gt	240 ag ga au As at ga a As aa gg au Gl at gt au Va au Se au Se au Se au Se au Se	c gg p Gl c ta p Ty c ca y Gl .c cg .1 Ar 30 .a cc	y As c ct r Le g ta n Ty c ac g Th sa gc	p Al g cc u Pr 27 t gt r Va c aa r Ly c ta	a Ar 26 c ct 5 g ga 1 Gl g cc r Le	a ggg Gl o a ggg u Gl u Gl u Va cc ac Th cg ga eu As	g gc ga gc ga gc aa ac	g atu Il t ga a Gl g ga eu As 29 tcg tc	c tte Phone g can u Gl 28 t gc ager Secret g Le	t ga e As 26 g ga n As 0 ea gc a Al gc cc er Pr	c at p III t gc p Al c ca a Hi c tc o Se ag ct sc tc s	c ta e Ty c at a Il c cc s Pr ca cg r Ar 31 cg tc	c gt r Va c ac e Th a ct o Le g ca g G] 5 a cc r Pi	g gtc 1 Val g ctg Ir Leu 285 g cgc Eu Arg 00 ig ggc In Gly	926 974 1022
101 t 102 S 103 105 a 106 T 107 2 109 c 110 A 111 113 t 114 T 115 117 t 118 T 119	er Gl 25 cc gc hr Al 70 gg ga rg Gl gg ct rp Le gg gt	240 g ga u As 55 ct ga a As a gg u Gl ct gt ct gt ag t ag g	c gg p Gl c ta p Ty c ca y Gl .c cg. 1 Ar 30 ca cc	y As c ct r Le g ta n Ty 29 c ac g Th sa gc	g cc u Pr 27 t gt r Va c aa r Ly	a Ar 26 c ct o Le 5 g ga 1 Gl g cc rs Pr	a ggg Gl o a ggg u Gl u Va cc ac Th cg ga eu As	c gay Gl gg gc y Al c ct l Le cc aa r Ly 31 ac ag xsp Ar	g atu Il t ga a Gl g ga eu As 29 cg tc s Se 00 gg ac cg Ar	c tte Ph g ca u Gl 28 t gc p Al c ag er Se	t ga e As g ga n As o ca gc a Al c cc er Pr	c at p II 5 5 t gc p Al c caa Hi c t co Se ig ct 33 ig gc	c ta e Ty c at a Il c cc s Pr a cg r Ar 31 cg tc eu Se	c gt r Va c ac e Th a ct o Le g ca g GJ 5 ca cc er Pi	g gtc.l Val g ctg r Leu 285 g cgc u Arg 00 g ggc n Gly ct gag co Glu	926 974 1022 1070
101 t 102 S 103 105 a 106 T 107 2 109 C 110 A 111 113 t 114 T 115 117 t 118 T 119 121 t 122 T	er Gl 25 cc gc hr Al 70 gg ga grg Gl gg ct rp Le gg gg rp Va gg gg	240 g ga u As it ga a As ia gg u Gl tt gt cu Va cg tc gg gc ly Al	c gg p Gl c ta p Ty c ca y Gl .c cg. 1 Ar 30 ca cc	y As c ct r Le g ta n Ty 29 c ac g Th sa gc	g cc u Pr 27 t gt r Va c aa r Ly	a Ar 26 c ct 5 g ga 1 Gl g cc s Pr cc ct cc cc a Pr	a ggg g Gl a ggg u Gl u Va co ac Th ag ga au As ag ga ac Th	c gay Gl gg gc y Al c ct l Le cc aa r Ly 31 ac ag xsp Ar	g atu Il t ga a Gl g ga eu As 29 cg tc s Se 00 gg ac cg Ar	c tte Ph g ca u Gl 28 t gc p Al c ag er Se	t ga e As 26 g ga n As 0 a gc a Al gc cc er Pr cc aa eu Ly gg ga	c at p III 5 t gc p Al c ca a Hi c co Se c	c ta e Ty c at a Il c cc s Pr a cg r Ar 31 cg tc eu Se	c gt r Va c ac e Th a ct o Le g ca g GJ 5 ca cc er Pi	g gtc 1 Val g ctg Ir Leu 285 g cgc Eu Arg 00 ig ggc In Gly	926 974 1022 1070
101 t 102 S 103 105 a 106 T 107 2 109 c 110 A 111 113 t 114 T 115 117 t 118 T 119 121 t 122 T	er Gl 25 cc gc hr Al 70 gg ga gg ct rp La gg gg rp Va gg gg rp G 3	240 ag ga au As at ga au Gl at gt	c gg p Gl c ta p Ty c ca y Gl c cg l Ar 30 c cc r Pr c gc a Al	y As c ct r Le g ta n Ty 29 c ac g Th sa gc Al	g cc u Pr 27 t gt c aa ir Ly ic ta a Ty	a Ar 26 c ct o Le 5 g ga 1 Gl g cc s Pr c ct c cc a Pr 34	a ggg Gl O O O O O O O O O O O O O O O O O O	g gc g gc g gc g Al c ct c aa c ag ac ag ac ag ac ag th	g atu Il t ga a Gl g ga su As 29 g to g Ac	c tte Ph g ca u Gl 28 ct gc p Al cc age cc age gc ct gc ct cc Gl	t ga e As 26 g ga n As 0 a gc a Al c cc er Pr c aa eu Ly gg ga ly Gl	c at p III 5 t gc p Al c ca Hi c co Se lig ct co Se lig ct al g gc lig gc lig Al li 5	c ta e Ty c at a Il c cc s Pr a cg r Ar 31 cg tc cu seq tc	c gt r Va c ac e Th a ct o Le 30 g ca g G 5 ca cc er Pr	g gtc l Val g ctg ir Leu 285 cg cgc au Arg 00 ig ggc in Gly ct gag co Glu	926 974 1022 1070
101 t 102 S 103 105 a 106 T 107 2 109 c 110 A 111 113 t 114 T 115 117 t 118 T 119 121 t 122 T 123	er Gl 25 cc gc hr Al 70 gg ga gg ct rp La gg gg rp Va gg gg 33	240 ag ga au As at ga au Gl at gt au Gl	c gg p Gl c ta p Ty c ca y Gl d Ar 30 ca cc er Pr cc gc a Al	y As c ct r Le g ta n Ty 29 c ac g Th sa gc Al	g cc u Pr 27 t gt c aa ir Ly ic ta a Ty	a Ar 26 c ct o Le 5 g ga 1 Gl g cc s Pr 1c ct cc cc a Pr 34	a ggg Gl O O O O O O O O O O O O O O O O O O	g ga g gc g gc g Al c ct l Le c aa g Ar 25 lu Ph	g atu II t ga a GI g ga su As gg tc gg Ai gg Ai cc cc ne Pi	c tt e Ph g ca u Gl 28 ct gc cr Se gg Le ct gg ct cc ag at	t ga e As 26 g ga n As 0 a gc a Al gc cc er Pr cc aa yg ga y Gl y Gl 34	c at p III p	c ta e Ty c at a Il c cc s Pr ca cg r Ar 31 cg tc cu	c gt r Va c ac e Th a ct o Le 30 cg Ca cg Gl	g gtc.l Val g ctg r Leu 285 g cgc u Arg 00 g ggc n Gly ct gag co Glu	926 974 1022 1070 1118

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1 2 1					370					3/3					300		1262
111	ctg	cag	cac	ctg	gag	cgc	tgc	CCC	cac	gtg	ccc	ata	gcc	gtg	gcc	ggc	1202
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145	gcc	atg	tgc	ttc	atc	aag	aac	Cag	γCg	gcc	Phe	Glu	Gln	Tvr	Leu	Glu	
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165	~~~	aac	aag	gcg	cgg	aac	aga	cag	aac	tgc	gcg	ctg	ctg	gag	cag	gcc Ala	1646
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175	i			545	1				550			, aat	aca			r acc	1790
177	ccc	ato	cgc	cag	ggc	cac	tto	att	y gug	j Lyy □ Trr	yay Cli	994 1615	. gca	Pro	Glv	gcc Ala	
		ıle			GLy	HIS	Pne	565	va.	r 11F	GIU	ı Oıy	570	)	, 011	y Ala	
179	)		560	)				200	, cat	cac	ato	r ttc			cac	aac	1838
181	. cgc	ate	g ccc	tgg	aag	990	· uii	; aac	, cg·	T His	· Va	) Phe	Leu	. Phe	Arc	g Asn	
				o Trp	р гуз	з Сту	580	) Par	TATA	, 1112	, , ,	585	5			,	
183	3	57	) +-	+.	. + ~		500	י רמנ	r car	а фас	e te			gat	aco	c gtc	1886
185	cac	CT	y gta	1 dl(	Lyc	. aay	pro	) Arc	, oga	a Asr	s Se	r Arc	Thi	Ásp	Th	val	
186	) H1S	, теі	u va.	г тте	- Cys	ь цуз 595	, , ,	J 114 5	,	E	601	0 -	-	-		605	
100	7 590	. + .	a a+.	7 ++ <i>/</i>	- 000	r aac	ato	ato	ı aa	g cto	g age	c ago	ato	gad	ct	g aac	1934
100	ago	Ld!	r 172	y LLC ] Dha	Δr	T Ast	Mei	t Met	Ly	s Lei	ı Se:	r Sei	c Ile	e Asp	Le	ı Asn	
		_ ту	r va.	T E 116	610	, ,			-1	615	5				620	0	
193	L				011	-											

RAW SEQUENCE LISTING

DATE: 03/04/2002 TIME: 14:49:08 PATENT APPLICATION: US/10/077,130

Input Set : A:\Seq Listing.txt
Output Set: N:\CRF3\03042002\J077130.raw

				o w or	-		•										1000
102	<b>~</b> 2.0	car	ata	ααα	aaa	qat	gac	cgc	gcc	ttc	gag	gtg	tgg	cag Gln	gag	cgg	1982
193	yac Nen	Gln	Val	Glu	Gly	Asp	Ásp	Arg	Ala	Phe	Glu	Val	Trp		Glu	Arg	
																	2020
	~ ~ ~	aac.	tca		cac	aaq	tac	ctg	ctg	cag	gca	cgg	aca	gcc Ala	att	atc	2030
197	gay	Acn	Car	Val	Ara	Lvs	Tyr	Leu	Leu	Gln	Ala	Arg	Thr	Ăla	Ile	IIe	
																	0070
	224	200		taa	ata	aaσ	gag	atc	tgt	ggc	atc	cag	cag	cgt Arq	ctg	gcc	2078
201	Tura	Cor	Sor	Trn	Val	Lvs	Ğlu	Ile	Cys	Gly	Ile	Gln	Gln	Arg	Leu	Ala	
																	2126
	ata		ata	† aa	caa	ccc	ccq	gac	ttt	gaa	gag	gag	ctg	gcc Ala	gac	tgc	2126
203	LOU	Dro	Val	Trn	Ara	Pro	Pro	Asp	Phe	Glu	Glu	Glu	Leu	Āla	Asp	Cys	
						675					000						0174
		acc	σασ	cta	aat	gag	aca	gtc	aag	ctg	gcc	tgc	cgc	gtg Val	acg	ggc	2174
209	mbr	Λla	Glu	T.en	Glv	Glu	Thr	Val	Lys	Leu	Ala	Cys	Arg	Val		Gly	
					$\sim \sim \sim$					ניפח					,		0000
211		ccc	ааσ	cct		atc	agc	tgg	tac	aaa	gat	ggg	aaa	gca	gtg	cag Gln	2222
213	mhr	Dro	Lve	Pro	Val	Ile	ser	Trp	Tyr	Lys	Asp	Gly	Lys	Ala	Val	Gln	
				705					/ 1 ( )					. — -			0070
215		a 2 0	000		cac	atc	ctc	att	gaa	gac	cct	gat	ggc	tcg:	tgt	gca Ala	2270
21/	gly	yac	Dro	. Uuc	His	Tle	Leu	Ile	Ğlu	Asp	Pro	Asp	Gly	Ser	Cys	Ala	
			700					117					, , ,				
219		- a+c			agc	ct.a	acc	ggt	gtg	gac	tct	ggc	cag	tac	ato	tgc Cys	2318
221	CLC	י מנט	Tou	, gac	Ser	Leu	Thr	Gĺy	Val	Asp	Ser	Gly	y Glr	r Tyr	Met	. Cys	
223				י אמר	י מככ	act	~~~		: tgc	agt	aco	cte	g ggd	aag	ato	ctg Leu	2366
225	Dha	y gou	, y.c.	Sar	, gcc · Δla	Δla	Glv	Asr	Cys	s Ser	Thi	c Lei	ı Gly	/ Lys	; Ile	Leu 765	
						7 5 5					, ,	,					
	7 750		. ~+		cca	~~	. ++	: ato	r aac	aac	gto	c cg	g gco	c tca	CCC	ttt Phe	2414
229	gu	Cac	1 900	Dro	Dro	Arc	$r$ Ph $\epsilon$	. Val	Ası	ı Lys	va.	l Ar	g Ala	a Sei	r	o Phe	!
233		_ ~~.	~ ~~	. ma			a dad	ı tto	aco	e tgo	ac	c at	c ga	a ggo	gc	c ccg	2462
23.	g guç	y yay	999	r Cli	, yac	λ	Glr	, 1 Phe	e Thi	r Cy:	s Th	r Il	e Gl	u Gly	y Ala	a Pro	)
23			~ ~ ~ ~		~ ~	t ta	r tao	c aa	g qa	c gg	g gc	c ct	g ct	g aco	c ac	t ggd r Gly	2510
23	/ tac	- D-	9 Ca	y ac	o Are	ים פי יידי די	o Trv∵	r Lv	s Asi	p Gl	y Al	a Le	u Le	u Thi	r Th	r Gly	?
			~ ~	^				20	<b>~</b>				01	0			
23					a aca	a ct	r ag	<del>-</del> да	a cc	t cq	c ag	c gg	c ct	g ct	a gt	g cto	g 2558
24	ı aa	c aa	g LL - Dh	0 Ca	y acco	r Lei	ı Se	r Gl	u Pr	o Ar	g Se	r Gl	у Le	u Le	u Va	l Le	ı
			_				υ,	( )				02					
24		81		a aa	מ מכי	n a σ	c aa	a aa	a aa	c ct	a aa	g ct	c ta	c ga	g tg	t gad s Gl	g 2606
24	5 gt	g at	c cg	g gc	9 90	a co	r Lv	9 95 c Gl	u As	ъ Le	u Gl	y Le	eu Ty	r Gl	и Су	s Gl	u
		_				0.3	<b>_</b>				04						
	7 83				a at	a aa	a to	ר מכ	a ca	a ac	t aq	it go	g ga	g ct	g cg	c at	t 2654
24	9 ct	g gt	g aa	c cg	y CC	9 99 11 Cl	V CD	r Al	a Ar	ra Al	a Se	er Ál	ā Ğl	u Le	u Ar	g Il 0	e
					0 5	()				0.0							
25					+	~ ~	a aa	יר רא	σ σε	αса	a to	rt ca	ac ac	ıg ga	g ca	g ct n Le	c 2702
25	3 ca	g ag	ic co	c at	g Ct	y ca	9 90 n x1	د د 1 <u>م</u> ھ	უ ყი n (31	11 Gl	n Cv	s Hi	is Ar	g Gl	u Gl	n Le	u
		n Se	er Pr	O ME	г те	u Gi	n WT	.u G1	87	0				87	5		
25	55			86	) 	- ~-	0 30		ں ں ادر د+	a as	ια σο	na oro	eg ga	с са	g ga	ıg gt	c 2750
25	57 gt	g go	et go	a gt	.g ga	a ya	.c ac	,cat		ים פי	- 5 - 5	, J	, ,				

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/077,130

DATE: 03/04/2002
TIME: 14:49:08

Input Set : A:\Seq Listing.txt
Output Set: N:\CRF3\03042002\J077130.raw

Output Set: N: (CRF) (03042000 (	
258 Val Ala Ala Val Glu Asp Thr Thr Leu Glu Arg Ala Asp Gln Glu Val	2798
259 880 and and according to the second seco	2/90
259 880 885  261 aca tct gtc ctg aag aga ctg ctg ggc ccc aag gcg cca ggc ccc tcc 262 Thr Ser Val Leu Lys Arg Leu Leu Gly Pro Lys Ala Pro Gly Pro Ser  262 Thr Ser Val Leu Lys Arg Leu Leu Gly Pro Lys Ala Pro Gly Pro Ser  260 905	
262 Thr Ser Val Leu Lys Alg Leu Lys Alg Leu 200 000	
263 895	2846
265 aca ggg gac ctc act ggc cct ggc ccc act ggc ccc acg Bro Arg Gly Ala Pro Ala	
265 aca ggg gac ctc act ggc cct ggc ccc tgc ccc agg sys you all a 266 Thr Gly Asp Leu Thr Gly Pro Gly Pro Cys Pro Arg Gly Ala Pro Ala 920	
267 910 915 920 201 tog gag gca	2894
267 910 915 920 269 ctc cag gaa acc ggc tcc cag ccc cca gtc acc gga act tcg gag gca 269 ctc cag gaa acc ggc tcc cag ccc cca gtc acc gga act tcg gag gca 269 ctc cag gaa acc ggc tcc cag ccc you all Thr Gly Thr Ser Glu Ala	
ozo rou Cla Clu Thr GIV Set Gin 110 200	
935 936 935 935	2942
2/1	2342
273 cct gcc gtg ccc ccg agg gtg cca cag ccc ctc ctc odd 34 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	
274 Pro Ala val Plo Plo Alg val 950	0000
275 945 and gag gag tag act qtg ccc	2990
277 gag cag gag ccg gag gcc att gala gln Glu Trp Thr Val Pro	
278 Glu Glu Pro Glu Alu 116 hara 970	
279 960 arg ggg ggg aga aga ggg aga ggg aga aga ggg aga aga ggg aga aga aga ggg aga ag	3038
281 att cgg atg gag ggt gca gcc tgg ccc gly Ala Gly Thr Gly Glu Leu	
282 Tle Arg Met Glu Gly Ala Ala Tip 110 021	
283 975 980 303 203 203 203 agg agg agg	3086
283 975 980  285 ctc tgg gac gtc cac agc cac gtg gtc aga gag acc aca cag agg acc  285 ctc tgg gac gtc cac agc cac gtg gtc aga gag acc aca cag agg acc	
286 Leu Trp Asp val his set had 1000 1005	3134
287 990 995 1000 289 tac aca tac cag gcc atc gac acg cac acc gca cgg ccc cca tcc atg	3201
289 tac aca tac cag gcc atc gac acg cac acc gca cag cac acg so	
290 Tyr Thr Tyl Gli Ald 115 del 1015 1020	2102
291 and add dec ear	3182
293 cag gta acc atc gag gat gtg cag gca cag aca ggc gga Thr Ala Gln 294 Gln Val Thr Ile Glu Asp Val Gln Ala Gln Thr Gly Gly Thr Ala Gln 1030	
294 Gln Val Thr He Glu Asp Val Str 1030 1035	
295 1025 and accited at accited tac	3230
297 ttc gag gct atc att gag ggc gac cca cag ccc cog gag Thr Trp Tyr 298 Phe Glu Ala Ile Ile Glu Gly Asp Pro Gln Pro Ser Val Thr Trp Tyr	
200 pho Clu Ala lie lie Giu Giy Mar 122	
290 Pile Gia hid 1030 299 1040 1045	3278
299 1040 1045 301 aag gac agc gtc cag ctg gtg gac agc acc cgg ctt agc cag cag caa 301 aag gac agc gtc cag ctg gtg gac agc acc cgg ctt agc cag caa	
202 Tye Asp Ser Val Gin Leu vai Asp 501	
1060 1055	3326
303 1055 1060 1060 1060 305 gaa ggc acc aca tac tcc ctg gtg ctg agg cat gtg gcc tcg aag gat 305 gaa ggc acc aca tac tcc ctg ytg ctg agg cat gtg gcc tcg aag gat	
and die die The The TVI BELLEU THE TOTAL T	
306 Glu Gly IIII IIII 172 1080 1080	3374
30/ 10/0	3374
309 gcc ggc gtt tac acc tgc ctg gcc caa dac acc ggc ggc Gl Val Leu 310 Ala Gly Val Tyr Thr Cys Leu Ala Gln Asn Thr Gly Gly Gln Val Leu 1095	
310 Ala Gly Val Tyr Inn Cy 1005 1100	0.400
1090 1095 311 1090 1095	3422
311 1090 1093 313 tgc aag gca gag ctg ctg gtg ctt ggg ggg gac aat gag ccg gac tca 313 tgc aag gca gag ctg ctg gtg ctt ggg ggg gac aat gag ccg gac tca	
314 Cys Lys Ala Glu Leu Leu Var Leu 1110	
315 TIUS and the tat gag gtc aag	3470
317 gag aag caa age cae egg agg aag etg ede tee tee tae gay y	
318 Glu Lvs GIn Ser HIS Aly Aly 275 1120	
319 1120 1125 1130	2510
Jij the man the offa and aud gly cuy cuy	3518
321 gag gag att gga agg ggc gtg ttt ggc ttc gca da agg ggc cin His	3518
319 1120 1125 321 gag gag att gga agg ggc gtg ttt ggc ttc gta aaa aga gtg cag cac 321 glu Glu Ile Gly Arg Gly Val Phe Gly Phe Val Lys Arg Val Gln His	3218



Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/077,130

DATE: 03/04/2002 TIME: 14:49:09

Input Set : A:\Seq Listing.txt

Output Set: N:\CRF3\03042002\J077130.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:4686 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

L:4735 M:259 W: Allowed number of lines exceeded, <223> Other Information:

L:4739 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8

L:4793 M:259 W: Allowed number of lines exceeded, <223> Other Information:

L:4797 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9